

CLAIMS

1. A holographic recording medium comprising, in a substantially identical plane, a white-light reconstruction holographic recording layer region capable of forming a white-light reconstruction hologram, having a thickness of 2 μm to 80 μm , and a Fourier holographic recording layer region capable of multiplexed hologram recording, having a thickness of 100 μm to 2 cm.
2. The holographic recording medium according to claim 1, wherein the white-light reconstruction holographic recording layer region is 3 μm to 40 μm thick, and the Fourier holographic recording layer region is 100 μm to 5 mm thick.
3. A holographic recording medium comprising, in a substantially identical plane, a white-light reconstruction holographic recording layer region, at least in part of which a white-light reconstruction hologram is formed, having a thickness of 2 μm to 80 μm , and a Fourier holographic recording layer region, at least in part of which multiplexed holograms are recorded, having a thickness of 100 μm to 2 cm.
- 20 4. The holographic recording medium according to claim 3, wherein the white-light reconstruction holographic recording layer region is 3 μm to 40 μm thick, and the Fourier holographic recording layer region is 100 μm to 5 mm thick.
- 25 5. The holographic recording medium according to claim 3, wherein a hologram formed in the white-light reconstruction

holographic recording layer is a reflection hologram.

6. The holographic recording medium according to claim 4,
wherein a hologram formed in the white-light reconstruction
holographic recording layer is a reflection hologram.

5 7. A method of holographic recording comprising the step
of irradiating, as an object beam, a two-dimensional pattern
image created by a spatial light modulator to the white-light
reconstruction holographic recording layer region in a
holographic recording medium comprising, in a substantially
10 identical plane, a white-light reconstruction holographic
recording layer region capable of forming a white-light
reconstruction hologram, having a thickness of 2 μm to 80 μm ,
and a Fourier holographic recording layer region capable of
multiplexed hologram recording, having a thickness of 100 μm to
15 2 cm.

8. The method of holographic recording according to claim
7, wherein the white-light reconstruction holographic
recording layer region is 3 μm to 40 μm thick, and the Fourier
holographic recording layer region is 100 μm to 5 mm thick in
20 the holographic recording medium.

9. The method of holographic recording according to claim
7, wherein the object beam is modulated by the spatial light
modulator, is switched to an optical path different from an
optical path used for irradiating the two-dimensional pattern
25 image, is Fourier-transformed, and then is irradiated as an

information beam to the Fourier holographic recording layer region in the holographic recording medium.

10. The method of holographic recording according to
claim 8, wherein the object beam is modulated by the spatial
5 light modulator, is switched to an optical path different from
an optical path used for irradiating the two-dimensional
pattern image, is Fourier-transformed, and then is irradiated
as an information beam to the Fourier holographic recording
layer region in the holographic recording medium.

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